




12-06-05

AF
2/10/05

Atty. Dkt. No. 15-NM-5334 (070191-0251)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Balloni et al.
Title: METHOD AND APPARATUS
FOR REMOTE OR
COLLABORATIVE CONTROL
OF AN IMAGING SYSTEM
Appl. No.: 09/745,320
Filing Date: 12/21/2000
Examiner: Lezak, Arrienne M.
Art Unit: 2143

CERTIFICATE OF EXPRESS MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
EV 625658863 US (Express Mail Label Number)	12/5/05 (Date of Deposit)
Carolyn Simpson (Printed Name)	
 (Signature)	

TRANSMITTAL

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith is the following document for the above-identified application:

[X] Brief on Appeal (26 pages) with authorization to charge deposit account 07-0845 in the amount of \$500.00 to cover the 37 C.F.R. 41.20(b)(2) appeal fee. If this fee is deemed insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 07-0845.

Respectfully submitted,

Date 12/5/05

By 

FOLEY & LARDNER LLP
Customer Number: 33679
Telephone: (414) 297-5897
Facsimile: (414) 297-4900

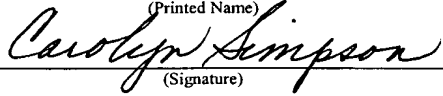
Jeffrey S. Gundersen
Attorney for Applicant
Registration No. 47,619



Atty. Dkt. No. 15-NM-5334 (070191-0251)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Applicant: Balloni et al.
Title: METHOD AND APPARATUS
FOR REMOTE OR
COLLABORATIVE CONTROL
OF AN IMAGING SYSTEM
Appl. No.: 09/745,320
Filing Date: 12/21/2000
Examiner: Lezak, Arrienne M.
Art Unit: 2143

CERTIFICATE OF EXPRESS MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service's "Express Mail Post Office To Addressee" service under 37 C.F.R. § 1.10 on the date indicated below and is addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.	
EV 625658863 US (Express Mail Label Number)	12/5/05 (Date of Deposit)
Carolyn Simpson (Printed Name)	
 (Signature)	

BRIEF ON APPEAL

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Under the provisions of 37 C.F.R. § 41.37, this Appeal Brief is being filed together with authorization to charge deposit account 07-0845 in the amount of \$500.00 to cover the 37 C.F.R. 41.20(b)(2) appeal fee. If this fee is deemed to be insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 07-0845.

12/06/2005 MGBREM1 00000108 070845 09745320
01 FC:1402 500.00 DA

REAL PARTY IN INTEREST

This patent is assigned to GE Medical Systems Global Technology Company and involves GE Medical Systems.

RELATED APPEALS AND INTERFERENCES

None.

STATUS OF CLAIMS

Claims 1-76 are pending in this application. Each claim has been rejected and each is being appealed.

STATUS OF AMENDMENTS

No amendments have been made after the most recent final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The present application relates generally to an imaging systems environment configured to permit remote and/or collaborative control of imaging systems. The claimed subject matter generally relates to methods and apparatus that permit one or more operators to simultaneously and/or collaboratively control acquisition of images acquired from an imaging system.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1, 17, 29, 64, 66, & 74 have been rejected under 35 USC § 112, second paragraph as being indefinite.

Each of Claims 1-76 was rejected as either anticipated or obvious in light of US Patent No. 5,715,823 to Wood et al. alone. Claims 1-4, 7-8, 10-11, 17-18, 21, 23-24, 26-27, 46-47, 52-53, 62, 66, 71, and 73 were rejected under 35 U.S.C. § 102(b) as anticipated by US Pat. No. 5,715,823 to Wood et al. Claims 9, 25, 12-16, 28-45, 48-51, 54-61, 63-65, 67-70, 72, and 74-76 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wood et al. While not specifically called out, it appears that Claims 5-6, 19-20, and 22 were also rejected as unpatentable under § 103(a) over Wood in sections 13 and 14 of the Office Action dated April 6, 2005.

ARGUMENT

I. Legal Standards

The rejection of the claims at issue in this appeal are made under 35 U.S.C. §§ 112, 102, and 103(a).

The second paragraph of § 112 of the patent statute places on the inventor the obligation of “particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention”. 35 U.S.C. § 112, second paragraph. This statutory requirement is a legal attempt to assure “that the public has fair notice of what the patentee and the Patent and Trademark Office have agreed constitute the metes and bounds of the claimed invention.” See London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538, 20 U.S.P.Q.2d 1456, 1458 (Fed. Cir. 1991). In interpreting claims, a court “should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582, 39 U.S.P.Q.2d 1573, 1577 (Fed. Cir. 1996).

Some claims have been rejected under 35 U.S.C. § 102 as anticipated. The legal standards under 35 U.S.C. §102 are well-settled. The “basic test” for anticipation of a patent claim by a prior art reference is this: to establish anticipation, there must be “identity of invention: the claimed invention, as described in appropriately construed claims, must be the same as that of the reference.” Glaverbel S.A. v. Northlake Marketing & Supply, Inc., 45 F.3d 1550, 1554, 33 U.S.P.Q.2d 1496, 1498 (Fed. Cir. 1995); see also Continental Can Co. v. Monsanto Co., 948 F.2d 1264, 1267, 20 U.S.P.Q.2d 1746, 1748 (Fed. Cir. 1991). “The claimed invention is not anticipated under §102 unless each and every element of the claimed invention is found in the prior art.” Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1379-80, 231 USPQ 81, 90 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987).

Finally, some claims have been rejected as unpatentable under 35 U.S.C. § 103(a) which states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the

differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35 U.S.C. § 103(a).

The legal standards under 35 U.S.C. § 103(a) are well-settled. Obviousness under 35 U.S.C. § 103(a) involves four factual inquiries: 1) the scope and content of the prior art; 2) the differences between the claims and the prior art; 3) the level of ordinary skill in the pertinent art; and 4) secondary considerations, if any, of nonobviousness. Litton Systems, Inc. v. Honeywell, Inc., 87 F.3d 1559, 1567, 39 U.S.P.Q.2d 1321, 1325 (Fed. Cir. 1996); see also Graham v. John Deere Co., 383 U.S. 1, 148 U.S.P.Q. 459 (1966).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. In re Piasecki, 745 F.2d 1468, 1471-72, 223 U.S.P.Q. 785, 787-88 (Fed. Cir. 1984). “[The Examiner] can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” In re Fritch, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992).

II. Claim Rejections Under § 112, second paragraph

In section 2 of the Office Action, Claims 1, 17, 29, 64, 66, & 74 were rejected under 35 USC § 112, second paragraph as being indefinite.

A. Claims 1, 17, 29, 64, and 74

Claims 1, 17, 29, 64, and 74 were rejected as indefinite for using the phrase “substantially real time.” Claims 1, 17, 29, 64, & 74 do not use the phrase “substantially real time.” Thus, this rejection of the claims is believed to be in error.

B. Claim 66

Claim 66 was rejected for using the phrase “it may be collaboratively controlled.” Section 112, second paragraph requires the claims to particular pointing out and distinctly claim the subject matter which the applicant regards as his invention. The phrase “it may be collaboratively controlled” seems reasonably clear to the applicant. The application model is configured such that it is capable of being controlled collaboratively by the first user interface and the second user interface. While the application model need not be collaboratively controlled, it includes the ability to be collaboratively controlled.

If felt to be more clear, other language can be used to recite this same concept.

II. Claim Rejections Under § 102 and § 103

The most recent Office Action detailing the rejections of the claims is the Office Action dated April 6, 2005. In Sections 3-20 of this Office Action, Claims 1-76 were rejected as either anticipated or obvious in light of US Patent No. 5,715,823 to Wood et al, alone.

A. Claims 46-58

In sections 4, 5, and 7 of the Office Action dated April 6, 2005, Claims 46-47 and 52-53 were rejected as anticipated by Wood et al (US 5,715,823). In section 10 of this Office Action, Claims 48-51, and 54-58 were rejected as unpatentable under § 103(a) over Wood et al. The examiner also provides further argument relating to these claims at section 24 of this Office Action.

Anticipation under § 102 requires that the prior reference teach or inherently disclose every element of the claim. Claim 46 recites “providing a first user interface at a first location and a second user interface at a second location; commanding an imaging system located at a third location with a command from at least one of the first user interface and the second user interface; generating an interface update in response to the command to the imaging system, the interface update including data representative of the image; and providing the interface update to the first user interface and the second user interface.”

Wood, contrary to the position taken by the Office Action in section 24, does not teach providing an update to both a first user interface and a second user interface (both at different locations than the imaging system) in response to a command from one of the first and second user interfaces. Rather, Wood teaches that a single user interface not located at the location of the ultrasound system is used to control the ultrasound system and is updated in response to its own commands. See, Col. 8, lines 48-51; and Col. 11, lines 43-49. Wood does not appear to teach updating one user interface not located at the location of the ultrasound system in response to a command from a different user interface not located at the location of the ultrasound system. Since Wood et al. fails to teach at least one element of Claim 46, Claim 46 is not anticipated by Wood et al.

Obviousness under § 103(a) requires that the patent office show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to modify Wood et al. in a manner that would supply the elements missing from Wood et al. Id. There is no suggestion in Wood et al or the general nature and skill in the art to provide an update to both a first user interface and a second user interface (both at different locations than the imaging system) in response to a command from one of the first and second user interfaces, which element is not taught in Wood et al. First, Wood et al. appears to teach updating information on a remote terminal based on a request from the remote terminal to update the information, and not based on commands made by a different remote terminal. See, e.g., Col. 8, lines 48-51; and Col. 11, lines 43-49. Second, Wood et al. does not appear to be directed to or suggest collaborative control of a system by two remote terminals. See, e.g., Col. 12, lines 8-29; and Col. 11, lines 56-59. Since there is no suggestion to modify Wood et al. in a manner that would supply the elements of Claim 46 that are not taught by Wood et al., Claim 46 is not invalid under § 103(a) as unpatentable over Wood et al.

Claims 47-58 depend from Claim 46 and would be allowable for at least the same reasons as Claim 46.

B. Claims 5, 33, 44, and 59

In sections 13 and 16 of the Office Action, Claims 5, 33, 44, and 59 were rejected as unpatentable under § 103(a) over Wood et al.

Claim 59 recites: “wherein the system is configured such that if a change is made to the application model using the first user interface data is automatically sent to the second user interface to update the second user interface, and such that if a change is made to the application model using the second user interface data is automatically sent to the first user interface to update the first user interface.”

As implicitly recognized by the Office Action, Wood does not teach a system that sends data to a second user interface to update the second user interface based on a change made by a first user interface, and vice versa. Rather, Wood only appears to update a user interface if the user specifically requests that the interface be updated. See Col. 8, lines 47-51 and Col. 11, lines 35-49.

Obviousness under § 103(a) requires that the patent office show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to modify Wood et al. in a manner that would supply the elements not taught by Wood et al.

Neither the general nature of skill in the art nor Wood et al provide a motivation to include this element which is not taught by Wood et al. Wood et al is directed to a remote control system that allows a doctor to remotely control the ultrasound device. See Col. 11, lines 50-53. This system appears that it is controlled by a single user. Col. 12, lines 8-29; and Col. 11, lines 56-59. Claim 59, alternatively, is directed to a collaborative control apparatus that allows multiple user interfaces to control the imaging system at roughly the same time. One feature that is recited in Claim 59 which allows collaborative control to run more smoothly is automatically updating the first interface based on at least some changes made by the second interface, and vice versa. This feature is not necessary for a remote control system where only a single user is in control of the system (as in the case of Wood et al). Thus, a person implementing the system of Wood et al would have no motivation to

modify the remote control system recited in Wood et al to form a system as recited in Claim 59.

Thus, Claim 59 recites at least one element not taught in or suggested by the system of Wood et al.

Claims 5, 33, and 44 recite elements similar to Claim 59 and are believed to further support the novelty of those claims for reasons similar to those discussed for Claim 59.

C. Claims 31-45

In Sections 10-13, and 15-17 of the Office Action dated April 6, 2005, Claims 31-45 were rejected as unpatentable under § 103(a) over Wood.

Claim 31 recites “means for updating located at the first location ... configured to automatically send interface updates to refresh the second means for interfacing.” As implicitly recognized by the Office Action, Wood et al does not teach a means for updating located at a first location that automatically sends interface updates to refresh means used for interfacing located at a second location as claimed in Claim 31. Rather, it appears that Wood teaches that a remote user of the system of Wood et al needs to specifically request that the system be updated for an update to be sent. Col. 11, lines 43-49. Thus, Wood fails to disclose at least this one element of Claim 31.

Obviousness under § 103(a) requires that the patent office show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to modify Wood et al. in a manner that would supply the elements not taught by Wood et al.

The system claimed in Claim 31 is not an obvious variation of the system disclosed in Wood et al. The Office Action appears to be arguing that one of ordinary skill in the art could make the interface of Wood continuous or automatic, but does not indicate why one of ordinary skill in the art would be motivated to make the change.¹ The closest the Office

¹ As noted by the Federal Circuit, the “factual inquiry whether to combine references must be thorough and searching.” McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 60 USPQ.2d 1001 (Fed. Cir. 2001). Further,

Action appears to reciting a motivation are the CGI programs. While Wood discloses CGI programs, those CGI programs only appear to execute commands in response to external requests for information, not continuously or automatically. Col. 8, lines 47-51. Thus, the presence of CGI programs did not appear to motivate Wood et al. itself to form a system as claimed in Claim 31. Thus, it is not believed that this teaching would motivate one of ordinary skill in the art to modify the system explicitly disclosed in Wood to go from a system that responds to external requests for information, to a system as claimed in Claim 31.

Claims 32-45 depend from Claim 31 and are allowable over Wood for at least the same reason as Claim 31.

D. Claims 66-76

In sections 4-5 of the Office Action, Claims 66, 71, and 73 were rejected as anticipated under § 102(b) by Wood et al (US 5,715,823). In Sections 10, 13-14, 16, and 19-20 of the Office Action, Claims 67-70, 72, and 74-76 were rejected as unpatentable under § 103(a) over Wood.

Anticipation under § 102 requires that Wood et al. teach all of the elements of Claim 66. Claim 66 recites “wherein the application model is configured such that it may be collaboratively controlled by the first user interface and the second user interface.” Wood et al does not disclose an application model that is collaboratively controllable by a first user interface and a second user interface. Rather, a single user appears to control the system disclosed in Wood. See e.g., Col. 11, lines 50-53. Thus, Claim 66 recites at least one element not taught in Wood et al. and is not anticipated by Wood et al.

Obviousness under § 103(a) requires that the patent office show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the

it “must be based on objective evidence of record.” *In re Lee*, 277 F.3d 1338, 61 USPQ.2d 1430 (Fed. Cir. 2002). The teaching or suggestion to make the claimed combination must be found in the prior art, and not in the applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ.2d 1438 (Fed. Cir. 1991). The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ.2d 1430 (Fed. Cir. 1990). “It is improper, in determining whether a person of ordinary skill would have been led to this combination of

art would lead that individual to modify Wood et al. in a manner that would supply the elements not taught by Wood et al.

One of ordinary skill in the art would not be motivated by the purpose of Wood et al to implement the missing element of Claim 66. As discussed above, Wood et al appears to be directed to a system that allows remote control of an imaging system by a single user. Col. 11, lines 50-59; and Col. 12, lines 8-29. Claim 66 is directed to a system that can be collaboratively controlled. Wood et al provides no motivation or suggestion to create a system that can be collaboratively controlled, nor does the general nature and skill in the art. Thus, one of ordinary skill in the art would not have been motivated to provide the element of Claim 66 not taught in Wood.

Claims 67-76 depend from Claim 66 and are believed to be allowable for at least the same reasons as Claim 66.

Additionally, Claim 67 further distances itself from Wood in that collaborative control includes automatically updating the interface not making the change when the interface used to make the change makes the change. This teaching is not found in Wood, nor would it be needed to implement the remote control system of Wood. In Wood it appears sufficient that only the remote user control the imaging system, thus providing no reason to update the local interface – particularly not automatically as claimed. See Col. 12, lines 8-29; and Col. 11, lines 56-59, and see also Col. 8, lines 48-51; Col. 11, lines 43-49. Thus, Claim 69 recites further elements that support the patentability of Claim 69.

Also, Claim 69 recites that both the first and second interfaces are located remotely from the application model. Neither the general nature and skill in the art nor Wood provides a motivation to include the ability for two people to collaboratively control the system remote from the application model using two separate interfaces. Instead, at best, Wood et al appears to teach a single remote user. See, e.g., Col. 12, lines 8-29; and Col. 11, lines 56-59. Thus, Claim 69 recites further elements that support the patentability of Claim 69.

references, simply to “[use] that which the inventor taught against its teacher.” Lee (citing W.L. Gore v. Garlock, Inc., 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983)).

E. Claims 1-30 and 59-65

In sections 4-8 of the Office Action, Claims 1-4, 7-8, 10-11, 17-18, 21, 23-24, 26-27, and 62 were rejected as anticipated by Wood et al. (US 5,715,823). In Sections 10, and 14-16, Claims 9, 12-16, 28-30, 59-61, and 63-65 were rejected as being unpatentable under § 103(a) over Wood. While not specifically called out, it appears that Claims 5-6, 19-20, and 22 were also rejected as unpatentable under § 103(a) over Wood in sections 13 and 14 of the Office Action.

Anticipation of Claim 1 by Wood et al. requires that the patent office show that Wood et al. includes every element of Claim 1. Claim 1 recites “controlling the application model using the first user interface and the second user interface at about a same time” in combination with the other elements of Claim 1. The Patent Office has failed to meet its burden of proving a prima facie case with respect to this element of Claim 1. Further, the patent office is not believed to be able to meet its burden since at least this element of Claim 1 is not taught or suggested by Wood et al.

No Office Action issued in this case has stated where “controlling the application model using the first user interface and the second user interface at about a same time” is shown in Wood et al or why such an element would be obvious in light of Wood et al. Further, no Office Action has even alleged that this element is shown in Wood et al despite the fact that the Applicant has argued that this element is not shown in Wood et al. Thus, the patent office has failed to meet its burden with respect to Claim 1.

It is not believed that the patent office will be able to meet its burden since Wood et al does not teach controlling the application model using the first user interface and the second user interface at about a same time in combination with the other elements of Claim 1. Rather, Wood et al appears to teach that when a remote user interface is used, the system is controlled only by the remote user interface. Col. 11, lines 25-49. Therefore, Wood does not anticipate Claim 1.

Obviousness under § 103(a) requires that the patent office show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the

art would lead that individual to modify Wood et al. in a manner that would supply the elements not taught by Wood et al.

Wood does not suggest this element which is not explicitly taught. Rather, Wood et al teaches that “a physician can perform an ultrasound exam from distances thousands of miles from the patient, needing only a pair of hands at the patient’s location to hold and manipulate the ultrasound probe.” Col. 11, lines 50-53. In other words, Wood suggests that the purpose of the person in the vicinity of the ultrasound system is to control the probe and not to control the system parameters. Thus, Wood would not suggest that an application model be controlled using both its local controls and its remote user interface. Therefore, Wood would not render Claim 1 unpatentable under § 103(a).

Claims 2-16 depend from Claim 1 and would be allowable over Wood for at least the same reason as Claim 1. Claims 17-30 and 59-65 recite elements similar to this element of Claim 1 and would be allowable over Wood et al for reasons similar to Claim 1.

F. Claims 12, 27, 39, 50

In sections 4-5 of the Office Action, Claim 12 was rejected as anticipated by Wood et al. In Sections 10 and 15 of the Office Action, Claims 12, 39, and 50 were rejected as being unpatentable under § 103(a) over Wood.

Claim 50 (depending from Claim 46) recites “providing a first user interface at a first location and a second user interface at a second location ... wherein the first location and the second location are proximate to each other.” As implicitly recognized by the Office Action, Wood et al. does not teach or suggest that two interfaces would be created proximate each other.

Obviousness under § 103(a) requires that the patent office show some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to modify Wood et al. in a manner that would supply the elements not taught by Wood et al.

Wood et al. does not suggest that two interfaces would be created proximate each other. Rather, the entire point of Wood appears to be providing the ability to create remote controls for the imaging device. See e.g. Col. 11, lines 50-53. If the physician were in proximity to the control panel 20 (Fig. 1), there would be no need (or teaching or suggestion) in the system of Wood to create a second user interface because there would be no need to remotely control the system. *Id.* Thus, Claim 50 further recites an element that is not suggested by Wood.

The Office Action argues that this is merely making integral two things that were previously not integral. See section 14. This is not the case. Rather, Claim 50 is directed to a system for collaborative control where the first interface and the second interface are located in proximity to each other. Wood, on the other hand and as discussed above, is directed solely to a system for remote control. Col. 11, lines 50-53. If a user were in proximity to the control panel 20 in the Wood et al system, then the Wood system would not need to provide for remote control. See, e.g., Col 11, lines 50-56.² Thus, Claim 50 introduces a claim element entirely different from the understandings and expectations of the cited art (Wood et al), and is not believed to be obvious in light of Wood et al. See MPEP 2144.04.

Claim 50 is thus believed to further recite elements not taught or suggested by the cited art and provide further support for allowance of Claim 50.

Claims 12, 27, and 39 recite elements similar to Claim 50 and are likewise believed to add further grounds of novelty to the claim from which they depend.

² See also, Col. 14, lines 18-19; Col. 2, lines 60-62; and Col. 1, lines 42-45.

III. Conclusion

In view of the foregoing, Appellants submit that the claims are not properly rejected as being unpatentable under 35 U.S.C. § 112, under 35 U.S.C. §102(a), or under 35 U.S.C. §103(a) over the cited reference. Accordingly, it is respectfully requested that the board reverse the claim rejections and indicate that a Notice of Allowance respecting all pending claims be issued.

Respectfully submitted,

Date Dec. 5, 2005

By 

FOLEY & LARDNER LLP
Customer Number: 33679
Telephone: (414) 297-5897
Facsimile: (414) 297-4900

Marcus A. Burch
Attorney for Applicant
Registration No. 52,673

CLAIMS APPENDIX

1. A method for remote or collaborative control of an imaging system, the imaging system associated with an application model located at a first location and the application model being in communication with the imaging system, the method comprising:

providing a first user interface at the first location;

providing a second user interface at a second location, in response to a request for remote or collaborative control of the imaging system at the second location; and

controlling the application model using the first user interface and the second user interface at about a same time.

2. The method of claim 1, wherein providing a second user interface includes generating the second user interface from the application model.

3. The method of claim 2, wherein providing a second user interface includes replicating at least a part of the first user interface using the application model to the second location.

4. The method of claim 1, further comprising commanding the imaging system using at least one of the first and the second user interfaces.

5. The method of claim 4, further comprising updating the first and the second user interfaces in response to at least one command made to the imaging system by at least one of the first and the second user interfaces or in response to at least one response returned from the imaging system.

6. The method of claim 5, wherein updating the first and the second user interfaces include the application model generating an interface update in response to the at least one command from the first or the second user interface or in response to the at least one response from the imaging system.

7. The method of claim 1, wherein the first location is proximate to the imaging system.

8. The method of claim 1, wherein the second location is remote from the first location and the imaging system.
9. The method of claim 8, wherein communicating with the application model by the second user interface includes communicating with a communications network coupled between the application model and the second user interface.
10. The method of claim 9, wherein the communications network is selected from a group including an intranet, the Internet, a local area network (LAN), a broadband network, a wireless network, and a variety of other networks.
11. The method of claim 1, wherein the second user interface is proximate to the imaging system.
12. The method of claim 1, wherein the second location is the first location.
13. The method of claim 12, wherein communicating with the application model includes the first and the second user interfaces directly communicating with the application model.
14. The method of claim 12, wherein the first user interface, the second user interface, and the application model are included in a collaboration control unit.
15. The method of claim 1, further comprising providing a third user interface at a third another location where the remote or collaborative control will occur, wherein the locations of the first, the second, and the third user interfaces are different from each other.
16. The method of claim 1, wherein the first user interface is a user interface selected from a group including a user interface similar to at least a portion of the second user interface, and a user interface different from the second user interface.
17. An apparatus for remote or collaborative control of an imaging system, the imaging system, the apparatus comprising:

a control unit including a first user interface and an application model, the control unit being in communication with the imaging system;

a second user interface provided at a second location, the second user interface usable for remote or collaborative control of the imaging system and being configured to transmit a command to the control unit and to receive a second user interface update from the control unit;

wherein the second user interface is provided in response to a request for remote or collaborative control of the imaging system at the second location; and

wherein the apparatus is configured such that the application model can be controlled using the first user interface and the second user interface at about a same time.

18. The apparatus of claim 17, wherein the second user interface is generated from the application model when remote or collaborative control of the imaging system is requested by an operator.

19. The apparatus of claim 17, wherein the second user interface is configured to transmit a command to the application model and to receive a user interface update from the application model.

20. The apparatus of claim 17, wherein the first user interface is configured to transmit a command to the application model and to receive a user interface update from the application model.

21. The apparatus of claim 20, wherein the imaging system is controlled via at least one of a first and a second command from the first and the second user interfaces, respectively.

22. The apparatus of claim 20, wherein user interface updates are generated by the application model in response to any of the command from the first user interface, the command from the second user interface, and at least one response returned from the imaging system.

23. The apparatus of claim 22, wherein user interface updates sent to the first user interface and the second user interface are similar to each other.

24. The apparatus of claim 17, wherein the second location is remote from the imaging system and the first location.
25. The apparatus of claim 24, further comprising a communications network coupled between the application model and the second user interface.
26. The apparatus of claim 25, wherein the communications network is selected from a group including an intranet, the Internet, a local area network (LAN), a broadband network, and a wireless network.
27. The apparatus of claim 17, wherein the second location is proximate to the first location.
28. The apparatus of claim 27, wherein the second user interface is included in the control unit.
29. The apparatus of claim 17, further comprising
- a third user interface at a third location where the remote or collaborative control will occur,
- wherein the locations of the first, the second, and the third user interfaces are different from each other; and
- wherein the apparatus is configured such that the application model can be controlled using the first user interface, the second user interface, and the third user interface at about a same time.
30. The apparatus of claim 17, wherein the second user interface is included in at least one of a local operator console and a remote workstation.
31. An apparatus for remote or collaborative control of an imaging system, the apparatus comprising:
- first means for interfacing at a first location;

second means for interfacing at a second location, in response to a request for remote or collaborative control of the imaging system at the second location; and

means for updating located at the first location and configured to receive a command from the second means for interfacing and transmit an interface update to the second means for interfacing in response to the command, the means for updating being configured to automatically send interface updates to refresh the second means for interfacing.

32. The apparatus of claim 31, wherein the means for updating is further configured to receive a command from the first means for interfacing and transmit an interface update to the first means for interfacing in response to the command from the first means for interfacing.

33. The apparatus of claim 32, wherein

the interface update transmitted in response to the command from the first means for interfacing is transmitted to the first and second means for interfacing in response to the command from the first means for interfacing, and

the interface update transmitted in response to the command from the second means for interfacing is transmitted to the first and second means for interfacing in response to the command from the second means for interfacing.

34. The apparatus of claim 31, wherein the second means for interfacing is generated from the means for updating in response to the request for remote or collaborative control from an operator located at the second location.

35. The apparatus of claim 31, wherein the second location is remote from the first location.

36. The apparatus of claim 35, further comprising means for communicating configured to provide communication between the means for updating and the second means for interfacing.

37. The apparatus of claim 36, wherein the means for communicating is selected from a group including an intranet, the Internet, a local area network (LAN), a broadband network, and a wireless network.

38. The apparatus of claim 31, wherein the means for updating and the first means for interfacing are located proximate to the imaging system.

39. The apparatus of claim 31, wherein the second location is the first location.

40. The apparatus of claim 39, wherein the means for updating, the first means for interfacing, and the second means for interfacing are included in a collaboration control.

41. The apparatus of claim 31, further comprising third means for interfacing at an another location where remote or collaborative control of the imaging system is requested, wherein the first, the second, and the third means for interfacing are provided at different locations.

42. The apparatus of claim 41, wherein the third means for interfacing is generated from the means for updating in response to a request for remote or collaborative control from an operator located at the another location.

43. The apparatus of claim 41, wherein the means for updating is further configured to receive a command from the third means for interfacing and transmit an interface update to the third means for interfacing in response to the third command.

44. The apparatus of claim 43, wherein the apparatus is configured such that

an interface update is transmitted to the first, second, and third means for interfacing in response to a command from the first means for interfacing,

the interface update transmitted in response to the command from the first means for interfacing is transmitted to the first, second, and third means for interfacing in response to the command from the second means for interfacing, and

the interface update transmitted in response to the command from the first means for interfacing is transmitted to the first, second, and third means for interfacing in response to the command from the third means for interfacing.

45. The apparatus of claim 31, wherein the imaging system is selected from a group including a magnetic resonance (MR) imaging system, a computerized tomography (CT) imaging system, a nuclear medicine (NM) imaging system, and a x-ray system.

46. An image generated by the steps comprising:

providing a first user interface at a first location and a second user interface at a second location;

commanding an imaging system located at a third location with a command from at least one of the first user interface and the second user interface;

generating an interface update in response to the command to the imaging system, the interface update including data representative of the image; and

providing the interface update to the first user interface and the second user interface,

wherein the second user interface is provided at the second location when a remote or collaborative control of the imaging system is requested by a user at the second location.

47. The image of claim 46, wherein the first location and the second location are remote from each other.

48. The image of claim 47, wherein the third location is the same as the first location or the second location.

49. The image of claim 47, wherein the first, the second, and the third locations are remote from each other.

50. The image of claim 46, wherein the first location and the second location are proximate to each other.
51. The image of claim 50, wherein the third location is the same as the first location or the second location.
52. The image of claim 50, wherein the third location is remote from at least one of the first location and the second location.
53. The image of claim 46, wherein the providing step includes providing the second user interface using an application model in communication with the imaging system.
54. The image of claim 46, further comprising communicating to and from the first and the second user interfaces via an application model in communication with the imaging system.
55. The image of claim 54, wherein the generating step includes generating the interface update using the application model.
56. The image of claim 55, further comprising updating the first and the second user interfaces in response to the interface update.
57. The image of claim 56, wherein the updating step includes displaying the image on a means for displaying associated with each of the first and the second user interfaces.
58. The image of claim 46, wherein the command is selected from a group including image contrast prescription commands, scanning session commands, image acquisition plane prescription commands, archiving commands, pulse sequence prescription commands, image retrieval commands, imaging system configuration commands, and a variety of other commands.
59. The apparatus of claim 17, wherein the system is configured such that if a change is made to the application model using the first user interface data is automatically sent to the second user interface to update the second user interface, and such that if a change is made to

the application model using the second user interface data is automatically sent to the first user interface to update the first user interface.

60. The apparatus of claim 17, wherein the application model is run on a processor separate from the imaging device.

61. The apparatus of claim 17, wherein the first user interface and second user interface are updated in real-time based on data from the application model.

62. The apparatus of claim 17, wherein the first user interface and the second user interface are configured to be controlled by a user in a same manner.

63. The apparatus of claim 17, wherein the first user interface and the second user interface are configured to display information relating to the application model in a same format.

64. The apparatus of claim 17, wherein the first user interface and second user interface are configured to be continuously updated in substantially real time.

65. The apparatus of claim 17, further comprising a third user interface configured to collaboratively control the application model with the first user interface and the second user interface.

66. A system for remote or collaborative control of an imaging system, comprising:
an application model configured to be in communication with an imaging device;

a first user interface configured to control the application model; and

a second user interface configured to control the application model;

wherein the application model is configured such that it may be collaboratively controlled by the first user interface and the second user interface.

67. The system of claim 66, wherein the system is configured such that if a change is made to the application model using the first user interface data is automatically sent to the second user interface to update the second user interface, and such that if a change is made to

the application model using the second user interface data is automatically sent to the first user interface to update the first user interface.

68. The system of claim 66, wherein the application model is run on a processor separate from the imaging device.

69. The system of claim 66, wherein the first user interface and the second user interface are located remote from the application model.

70. The system of claim 66, wherein the first user interface and second user interface are updated in real-time based on data from the application model.

71. The system of claim 66, wherein the first user interface and the second user interface are configured to be controlled by a user in a same manner.

72. The system of claim 66, wherein the first user interface and the second user interface are configured to display information relating to the application model in a same format.

73. The system of claim 66, wherein the first user interface is configured to be generated in response to a request for control of the imaging system at a first location, and the second user interface is configured to be generated in response to a request for control of the imaging system at a second location.

74. The system of claim 66, wherein the first user interface and second user interface are configured to be continuously updated in substantially real time.

75. The system of claim 66, further comprising a third user interface configured to collaboratively control the application model with the first user interface and the second user interface.

76. The system of claim 66, wherein the application model is run on a processor that is part of the imaging device.

EVIDENCE APPENDIX

RELATED PROCEEDINGS APPENDIX